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  * * * * * * * * * * * * * * STN  Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:36:46 ON 19 OCT 2000

=> fil .bec

COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.15       0.15

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
       ESBIOBASE, BIOTECHNO' ENTERED AT 16:36:55 ON 19 OCT 2000
ALL COPYRIGHTS AND RESTRICTIONS APPLY.  SEE HELP USAGETERMS FOR DETAILS.

10 FILES IN THE FILE LIST

=> s sulfolobus or acidocaldarius

FILE 'MEDLINE'
           770 SULFOLOBUS
           342 ACIDOCALDARIUS
L1         838 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'SCISEARCH'
          1326 SULFOLOBUS
           730 ACIDOCALDARIUS
L2        1463 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'LIFESCI'
           705 SULFOLOBUS
           344 ACIDOCALDARIUS
L3         772 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOTECHDS'
           312 SULFOLOBUS
           163 ACIDOCALDARIUS
L4         363 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOSIS'
          1201 SULFOLOBUS
           647 ACIDOCALDARIUS
L5        1357 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'EMBASE'
           728 SULFOLOBUS
           343 ACIDOCALDARIUS
L6         806 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'HCAPLUS'
          1353 SULFOLOBUS
           678 ACIDOCALDARIUS
L7        1507 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'NTIS'
            37 SULFOLOBUS
            14 ACIDOCALDARIUS
L8          40 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'ESBIOBASE'
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           454 SULFOLOBUS
           181 ACIDOCALDARIUS
L9         491 SULFOLOBUS OR ACIDOCALDARIUS

FILE 'BIOTECHNO'
           658 SULFOLOBUS
           275 ACIDOCALDARIUS
L10        709 SULFOLOBUS OR ACIDOCALDARIUS

TOTAL FOR ALL FILES
L11       8346 SULFOLOBUS OR ACIDOCALDARIUS

=> s trehalose

FILE 'MEDLINE'
L12       1972 TREHALOSE

FILE 'SCISEARCH'
L13       2535 TREHALOSE

FILE 'LIFESCI'
L14       1308 TREHALOSE

FILE 'BIOTECHDS'
L15        521 TREHALOSE

FILE 'BIOSIS'
L16       3823 TREHALOSE

FILE 'EMBASE'
L17       1935 TREHALOSE

FILE 'HCAPLUS'
L18       5656 TREHALOSE

FILE 'NTIS'
L19         61 TREHALOSE

FILE 'ESBIOBASE'
L20        805 TREHALOSE

FILE 'BIOTECHNO'
L21       1037 TREHALOSE

TOTAL FOR ALL FILES
L22      19653 TREHALOSE

=> s non-reducing saccharide#

FILE 'MEDLINE'
       2433763 NON
         73955 REDUCING
          2623 SACCHARIDE#
L23          1 NON-REDUCING SACCHARIDE#
                 (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'SCISEARCH'
        518884 NON
         82111 REDUCING
          3553 SACCHARIDE#
```

```
L24           2 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'LIFESCI'
        118756 "NON"
         19077 "REDUCING"
          1005 SACCHARIDE#
L25          3 NON-REDUCING SACCHARIDE#
                  ("NON"(W)"REDUCING"(W)SACCHARIDE#)

FILE 'BIOTECHDS'
         22327 NON
          5859 REDUCING
           706 SACCHARIDE#
L26         15 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'BIOSIS'
        474771 NON
         80070 REDUCING
         27137 SACCHARIDE#
L27         13 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'EMBASE'
        428771 "NON"
         70859 "REDUCING"
          2332 SACCHARIDE#
L28          0 NON-REDUCING SACCHARIDE#
                  ("NON"(W)"REDUCING"(W)SACCHARIDE#)

FILE 'HCAPLUS'
        410977 NON
        186467 REDUCING
         10184 SACCHARIDE#
L29         19 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'NTIS'
         84456 NON
         24538 REDUCING
           250 SACCHARIDE#
L30          0 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'ESBIOBASE'
        127286 NON
         19949 REDUCING
           810 SACCHARIDE#
L31          0 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

FILE 'BIOTECHNO'
         95655 NON
         15581 REDUCING
           934 SACCHARIDE#
L32          0 NON-REDUCING SACCHARIDE#
                  (NON(W)REDUCING(W)SACCHARIDE#)

TOTAL FOR ALL FILES
```

```
L33          53 NON-REDUCING SACCHARIDE#

=> s (l22 or l33)(8a)(synthes? or produc? or form######)(5a)enzym?

FILE 'MEDLINE'
        360157 SYNTHES?
        892273 PRODUC?
        925210 FORM######
        854146 ENZYM?
L34          39 (L12 OR L23)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'SCISEARCH'
        607484 SYNTHES?
       1148375 PRODUC?
       1300302 FORM######
        369456 ENZYM?
L35          51 (L13 OR L24)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'LIFESCI'
        111542 SYNTHES?
        378068 PRODUC?
        287187 FORM######
        174869 ENZYM?
L36          36 (L14 OR L25)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'BIOTECHDS'
         20899 SYNTHES?
        148825 PRODUC?
         59860 FORM######
         87824 ENZYM?
L37          48 (L15 OR L26)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'BIOSIS'
        519392 SYNTHES?
       1257082 PRODUC?
       1094999 FORM######
        909774 ENZYM?
L38          70 (L16 OR L27)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'EMBASE'
        449294 SYNTHES?
        895958 PRODUC?
        830949 FORM######
        591498 ENZYM?
L39          31 (L17 OR L28)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'HCAPLUS'
        999290 SYNTHES?
       2470442 PRODUC?
        625169 PRODN
       2781937 PRODUC?
                 (PRODUC? OR PRODN)
       3685888 FORM######
        759973 ENZYM?
L40         119 (L18 OR L29)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'NTIS'
         39512 SYNTHES?
        341830 PRODUC?
        269806 FORM######
```

```
        11891 ENZYM?
L41         4 (L19 OR L30)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'ESBIOBASE'
       105954 SYNTHES?
       287167 PRODUC?
       233496 FORM######
       146854 ENZYM?
L42        26 (L20 OR L31)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

FILE 'BIOTECHNO'
       135351 SYNTHES?
       298474 PRODUC?
       238674 FORM######
       270706 ENZYM?
L43        32 (L21 OR L32)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A)ENZYM?

TOTAL FOR ALL FILES
L44       456 (L22 OR L33)(8A)(SYNTHES? OR PRODUC? OR FORM######)(5A) ENZYM?

=> s l44 and thermostab?

FILE 'MEDLINE'
         4753 THERMOSTAB?
L45         3 L34 AND THERMOSTAB?

FILE 'SCISEARCH'
         6070 THERMOSTAB?
L46         7 L35 AND THERMOSTAB?

FILE 'LIFESCI'
         2930 THERMOSTAB?
L47         5 L36 AND THERMOSTAB?

FILE 'BIOTECHDS'
         5495 THERMOSTAB?
L48        13 L37 AND THERMOSTAB?

FILE 'BIOSIS'
         8021 THERMOSTAB?
L49         9 L38 AND THERMOSTAB?

FILE 'EMBASE'
         7587 THERMOSTAB?
L50         5 L39 AND THERMOSTAB?

FILE 'HCAPLUS'
        13309 THERMOSTAB?
L51        11 L40 AND THERMOSTAB?

FILE 'NTIS'
          178 THERMOSTAB?
L52         0 L41 AND THERMOSTAB?

FILE 'ESBIOBASE'
         1943 THERMOSTAB?
L53         3 L42 AND THERMOSTAB?

FILE 'BIOTECHNO'
         4641 THERMOSTAB?
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```
L54           5 L43 AND THERMOSTAB?

TOTAL FOR ALL FILES
L55          61 L44 AND THERMOSTAB?

=> s l11 and (l22 or l33)

FILE 'MEDLINE'
L56          11 L1 AND (L12 OR L23)

FILE 'SCISEARCH'
L57          23 L2 AND (L13 OR L24)

FILE 'LIFESCI'
L58           9 L3 AND (L14 OR L25)

FILE 'BIOTECHDS'
L59          19 L4 AND (L15 OR L26)

FILE 'BIOSIS'
L60          17 L5 AND (L16 OR L27)

FILE 'EMBASE'
L61           5 L6 AND (L17 OR L28)

FILE 'HCAPLUS'
L62          32 L7 AND (L18 OR L29)

FILE 'NTIS'
L63           0 L8 AND (L19 OR L30)

FILE 'ESBIOBASE'
L64          12 L9 AND (L20 OR L31)

FILE 'BIOTECHNO'
L65          12 L10 AND (L21 OR L32)

TOTAL FOR ALL FILES
L66         140 L11 AND (L22 OR L33)

=> s (l55 or l66)not 1996/py range=,1996

FILE 'MEDLINE'
        223309 1996/PY
L67           0 (L45 OR L56)NOT 1996/PY

FILE 'SCISEARCH'
        794148 1996/PY
L68           0 (L46 OR L57)NOT 1996/PY

FILE 'LIFESCI'
         43658 1996/PY
L69           1 (L47 OR L58)NOT 1996/PY

FILE 'BIOTECHDS'
         11161 1996/PY
L70           6 (L48 OR L59)NOT 1996/PY

FILE 'BIOSIS'
        405433 1996/PY
```

```
L71           1 (L49 OR L60)NOT 1996/PY

FILE 'EMBASE'
        338946 1996/PY
L72           0 (L50 OR L61)NOT 1996/PY

FILE 'HCAPLUS'
        659369 1996/PY
L73           3 (L51 OR L62)NOT 1996/PY

FILE 'NTIS'
         14160 1996/PY
L74           0 (L52 OR L63)NOT 1996/PY

FILE 'ESBIOBASE'
        151367 1996/PY
L75           0 (L53 OR L64)NOT 1996/PY

FILE 'BIOTECHNO'
              0 1996/PY
L76           0 (L54 OR L65)NOT 1996/PY

TOTAL FOR ALL FILES
L77          11 (L55 OR L66) NOT 1996/PY

=> s (l55 or l66) and py=<1995 range=1997,

FILE 'MEDLINE'
         18926 PY=<1995
L78           0 (L45 OR L56) AND PY=<1995

FILE 'SCISEARCH'
           525 PY=<1995
L79           0 (L46 OR L57) AND PY=<1995

FILE 'LIFESCI'
         13245 PY=<1995
L80           0 (L47 OR L58) AND PY=<1995

FILE 'BIOTECHDS'
           255 PY=<1995
                 (PY=<1995)
L81           0 (L48 OR L59) AND PY=<1995

FILE 'BIOSIS'
          5732 PY=<1995
L82           0 (L49 OR L60) AND PY=<1995

FILE 'EMBASE'
           634 PY=<1995
L83           0 (L50 OR L61) AND PY=<1995

FILE 'HCAPLUS'
         33103 PY=<1995
L84           0 (L51 OR L62) AND PY=<1995

FILE 'NTIS'
         64177 PY=<1995
L85           0 (L52 OR L63) AND PY=<1995
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FILE 'ESBIOBASE'
          384 PY=<1995
L86         0 (L53 OR L64) AND PY=<1995

FILE 'BIOTECHNO'
       845083 PY=<1995
L87         0 (L54 OR L65) AND PY=<1995

TOTAL FOR ALL FILES
L88         0 (L55 OR L66) AND PY=<1995

=> dup rem l77

PROCESSING COMPLETED FOR L77
L89          7 DUP REM L77 (4 DUPLICATES REMOVED)

=> d tot


L89  ANSWER 1 OF 7  BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI    Novel transferase and amylase production and use;
        enzyme preparation for oligosaccharide and alpha,alpha-
       trehalose production
AU    Kato M; Miura Y; Kettoku M; Kobayashi K; Iwamatsu A; Komeda T
AN    1996-02920  BIOTECHDS
PI    WO 9534642 21 Dec 1995

L89  ANSWER 2 OF 7  BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI    Thermostable non-reducing
    saccharide-forming enzyme;
        non-reducing partial starch hydrolyzate or trehalose
       production using new Sulfolobus sp. enzyme
        and glucoamylase or alpha-glucosidase for use as a sweetener, etc.
AU    Nakada T; Chaen H; Sugimoto T; Miyake T
AN    1996-03026  BIOTECHDS
PI    EP 688867 27 Dec 1995

L89  ANSWER 3 OF 7  BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI    Thermostable trehalose-releasing enzyme;
        Sulfobolus acidocaldarius and Sulfobolus solfataricus
        thermostable enzyme production and characterization,
AU    Ikegami S; Kubota M; Sugimoto T; Miyake T
AN    1996-04132  BIOTECHDS
PI    EP 688866 27 Dec 1995

L89  ANSWER 4 OF 7  BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI    Non-reducing saccharide-forming
    enzyme and its production and application;
        Arthrobacter sp. and Rhizobium sp. fermentation and enzyme
        use in alpha-glucosyl trehalose production
AN    1994-11285  BIOTECHDS
PI    EP 606753 20 Jul 1994

L89  ANSWER 5 OF 7  BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI    Thermostable amylolytic activity from Sulfolobus
      solfataricus;
        amylase production, purification and characterization; starch
        saccharification to glucose and trehalose
SO    Biotech Forum Eur.; (1991) 8, 4, 201-03
AU    Lama L; Nicolaus B; Trincone A; Morzillo P; Calandrelli V; Gambacorta A
```

AN 1991-08311 BIOTECHDS

L89 ANSWER 6 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
TI Starch conversion with immobilized thermophilic archaebacterium **Sulfolobus** solfataricus; glucose production from starch saccharification by thermostable glucoamylase
SO Biotechnol.Lett.; (1990) 12, 6, 431-32
CODEN: BILED3
AU Lama L; Nicolaus B; Trincone A; Morzillo P; De Rosa M; Gambacorta A
AN 1990-10306 BIOTECHDS

L89 ANSWER 7 OF 7 LIFESCI COPYRIGHT 2000 CSA DUPLICATE 3
TI **Trehalose** in archaebacteria.
SO SYST. APPL. MICROBIOL., (1988) vol. 10, no. 3, pp. 215-217.
AU Nicolaus, B.; Gambacorta, A.; Basso, A.L.; Riccio, R.; De Rosa, M.; Grant, W.D.
AN 88:92917 LIFESCI

=> d ab tot

L89 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB A transferase is claimed, which acts on a saccharide composed of at least 3 sugar units, where at least 3 glucose residues are linked alpha-1,4 so as to transfer the alpha-1,4 linkages to alpha-1,alpha-1 linkages. Also claimed are: (a) a gene coding for the transferase; (b) a process for producing an oligosaccharide using the transferase; (c) an amylase that has principal activity of acting on a saccharide composed of 3 sugar units, where at least 3 sugar units on the reducing end side are glucose units and the linkage between the first and second glucose units is alpha-1,alpha-1, while the linkage between the second and the third glucose units is alpha-1,4, so as to liberate alpha,alpha-**trehalose** by hydrolyzing the alpha-1,4 linkage within the molecular chain of the substrate and that liberates disaccharides and monosaccharides as the principle final products; (d) a process for producing the amylase; (e) a gene coding for the amylase; and (e) a process of producing alpha-alpha-**trehalose** from e.g. malto-oligosaccharides by using a combination of the transferase and the amylase. (306pp)

L89 ANSWER 2 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB A new **thermostable enzyme forms** a **non-reducing saccharide** with a **trehalose** structure when reacted with a reducing partial starch hydrolyzate with a degree of glucose polymerization of at least 3, preferably with a **trehalose** end unit. The enzyme is stable up to 85 deg at pH 7.0 for 60 min, and is from a **Sulfolobus** sp. The enzyme has a mol.wt. of 69,000-79,000 (SDS-PAGE), a pI of 5.4-6.4, an optimum temp. of 75 deg (at pH 5.5 for 60 min), an optimum pH of 5.0-5.5 (at 60 deg for 60 min), and pH stability at pH 4.0-9.5 (at 25 deg for 16 hr). The product may be purified further by strongly acidic cation-exchange chromatography. A food product, cosmetic or pharmaceutical containing the product is also new. **Trehalose** (in hydrous or anhydrous crystalline form) may be produced by treating the product with glucoamylase (EC-3.2.1.3) or alpha-glucosidase (EC-3.2.1.20). The product may be used as a sweetener, osmoregulator, excipient, etc., and has higher stability than reducing starch hydrolyzates. The process may be carried out on an industrial scale at

relatively low cost. (26pp)

L89 ANSWER 3 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB The following are claimed: (1) a thermostable **trehalose**-releasing enzyme (I) which specifically hydrolyzes the linkage between the **trehalose** portion and the remaining glycosyl portion of a **non-reducing saccharide** having a terminal **trehalose** unit and a degree of glucose polymerization of at least 3; (2) production of (I) by culturing an (I)-producing microorganism in a nutrient medium and recovering (I) from the culture; (3) a process for producing **trehalose** by allowing (I) to act on a solution containing a saccharide as above; (4) a **trehalose** prepared by the above process; and (5) a composition containing the **trehalose** of (I), especially a food product, cosmetic or pharmaceutical. Preferably, (I) is derived from Sulfobolus **acidocaldarius** ATCC 33909, S. **acidocaldarius** ATCC 49426, Sulfobolus solfataricus ATCC 35091 and S. solfataricus ATCC 35092. (I) has better thermal stability than similar enzymes derived from Rhizobium and sp. Arthrobacter sp., and it is stable at temp. levels above 55 deg. (I) has a mol.wt. of 54,000-64,000 (SDS-PAGE), a pI of 5.6-6.6, and an optimum temp. of 75 deg when incubated at pH 6 for 30 min. (36pp)

L89 ANSWER 4 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB A new **non-reducing saccharide-forming enzyme** (I) is prepared by culturing a bacterium of the genera Rhizobium, Arthrobacter, Brevibacterium, Flavobacterium, Micrococcus, Curtobacterium, Mycobacterium or Terrebacter or their mutants, especially Rhizobium sp. M-11 (FERM BP-4130) and Arthrobacter sp. Q36 (FERM BP-4316). (I) is capable of catalyzing the formation of trehalose-type sugars with a trehalose structure as an end unit from partial starch hydrolyzates of degree of glucose polymerization at least 3. Glucoamylase (EC-3.2.1.3) and alpha-glucosidase (EC-3.2.1.20) may then be used to convert the product to trehalose. The trehalose-type sugars are useful in food, cosmetics and pharmaceuticals. (I) has mol.wt. 76,000-87,000 (SDS-PAGE), isoelectric point 3.6 +/- 4.6 using an ampholyte, optimal activity at 35-40 deg and pH 6.4-7.2, **thermostability** up to 35-40 deg at pH 7.0 for 1 hr; and pH stability of 5.5-11.0 at 25 deg for 16 hr. (I) forms alpha-glucosyl trehalose of formula Gn-T (where G = glucose residue, n = integer and T = alpha,alpha-trehalose). Alpha-glucosyl trehalose and its compositions are also new. (42pp)

L89 ANSWER 5 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB **Sulfolobus** solfataricus MT-4 (ATCC 49155), an archaebacterium capable of converting starch to glucose and **trehalose**, was grown at 87 deg in a defined culture medium. Amylase activity was isolated from the cytoplasmic fraction of disrupted cells by ammonium sulfate precipitation, acetone precipitation and dialysis. The partially purified enzyme (PPE) was stable after 5 hr at 80 deg, and showed a half-life of 1 hr at 90 deg. Amylolytic activity was detected at pH 3.5-9.0 and 30-100 deg. Optimal activity was shown at 70 deg and pH 5.5. The PPE was inhibited by Cu2+ and Zn2+, but not by Mg2+, dithiothreitol or beta-cyclodextrin. Ca2+ was not required for activity. PPE hydrolyzed starch and amylopectin to form glucose, and hydrolyzed linear oligosaccharides (more than 3 sugar units) to form glucose and malto derivatives. Non-reducing alpha,alpha'-**trehalose** (a potential sweetener, cosmetic and cryoprotectant) was also **formed**. Further **enzyme** purification is being investigated in order to determine whether a single enzyme is responsible for both the hydrolysis and **trehalose** production activities. (9 ref)

L89 ANSWER 6 OF 7 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB Alginate-immobilized **Sulfolobus** solfataricus strain MT-4 (ATCC 49155) was used for the saccharification of starch to produce glucose. Immobilized cells (2.5 g wet wt.) were added to starch (15 mg) in 9 ml of 10 mM acetate buffer pH 5.5 and incubated at 70 deg. Amylolytic activity of S. solfataricus converted starch to glucose and **trehalose** after 1 hr and 3 hr, respectively. The relative molar ratio of glucose and **trehalose** was 2:1. Glucose and **trehalose** represented 44% of the initial amount of starch. As glucose was the first product of starch hydrolysis with whole cells of S. solfataricus, the amylolytic activity was determined as a glucoamylase (EC-3.2.1.3). The formation of the non-reducing sugar **trehalose**, and the absence of maltose, maltotriose, etc., in the hydrolysis process suggested that a new type of enzymic activity, or multiple enzyme pathway was present in S. solfataricus. (7 ref)

L89 ANSWER 7 OF 7 LIFESCI COPYRIGHT 2000 CSA DUPLICATE 3
AB The non-reducing disaccharide **trehalose** (alpha -D-glucopyranosyl- alpha -D-glucopyranoside) was identified in **Sulfolobus** solfataricus by super(13)C NMR spectroscopy. The screening of a range of other archaebacteria, using a rapid isolation and purification procedure for **trehalose**, indicated that this disaccharide is present in a number of halophilic archaebacteria, thermophilic and sulphur-dependent archaebacteria and methanogenic archaebacteria.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	34.86	35.01

STN INTERNATIONAL LOGOFF AT 16:50:02 ON 19 OCT 2000